CHOICE OF TECHNIC IN HYSTERECTOMY.*

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The choice of operation in hysterectomy must depend on the pathology present. The pathologic conditions which demand hysterectomy are cancer, myoma, fibroid, infection, adhesions, prolapse and cases demanding Porro operation. Which type of operation shall we choose, and what shall be the determining features? In cancer of the cervix, seen sufficiently early, the best *end* results are to be obtained by using Wertheim's operation or one of its modifications. Vaginal hysterectomy offers very little more than thorough curetting and cauterization with 50% chloride of zinc, and is only to be considered when the patient is too weak to stand the abdominal operation, or the cancer is too far advanced to expect a probability of cure. Cancer of the body of the uterus should invariably be attacked by the abdominal route, as we often find that the disease has advanced further than was supposed and operation is useless.

Much time may be saved in cases of cancer of the cervix by curetting away the cancerous mass, ringing the vagina and separating it from the surrounding tissues, then sewing it up so as to prevent any soiling of tissues. This should be done before opening the abdomen. This eliminates one of the difficult features of the operation and enables the operator to cut the vagina at the proper height. After the uterus, adnexa and lymphatic glands are removed, it is advisable to cover over the area which is denuded of peritoneum with the sigmoid flexure, as practised by Faure of Paris, or by using a piece of omentum which may or may not be detached. This prevents adhesions of the small intestines and separates the lower pelvis from above in case of infection. It is advisable in all these cases to use gauze loosely packed in the upper part of the vagina and left in until adhesions have formed, usually two or three days.

Regarding the end results following hysterectomy for cancer of the uterus, even the most ardent advocates of the vaginal method have to admit that there are very many fewer recurrences after a complete abdominal operation than after one through the vagina. One of the most important points to remember, whether the operation is done through the vagina or the abdomen, is to have plenty of room, and when the vagina is at all narrow, ample room may be obtained by slitting it from the cervix to a point near the tuberosity of the ischium, being careful to avoid the rectum. Schuchart.

The technic which I usually employ is as follows: Before opening the abdomen, curette and cauterize the cancerous mass, ring the vagina, separate it from the surrounding tissues and sew it up. Open the abdomen, using high Trendelenburg position, pack the intestines back, ligate the ovarian vessels close to the pelvic brim, open the peritoneum over the internal iliac arteries and ligate the uterine vessels. If the lymphatic glands show the slightest sign of enlargement or induration they are removed. The lateral attachments of the vagina are then cut through and the bladder having been separated from the uterus, the mass is removed entire. The bare surfaces are covered as described above, the vagina loosely packed with gauze, and the abdomen closed without drainage.

I have not employed Werder's ignihysterectomy, and can not compare it with other methods, but would caution those using it to avoid the danger of burning the tissues close to the ureters, bladder or rectum.

For the removal of the myomatous uterus the abdominal route is undoubtedly the method of choice. Operators through the vagina may undoubtedly become expert enough to remove even large myomatous uteri by morcellation, but there is nothing to gain and much to lose by not opening the abdomen in these cases. The excuses usually given for vaginal removal are absence of post operative shock, rapidity, and absence of abdominal scar. In the last hundred consecutive cases of hysterectomy for myomata or fibroid uterus, all abdominal, I have had no deaths, the post operative shock has been practically nil, and when the uterus is not adherent nor packed in the pelvis, its removal is accomplished in a few minutes. We have of course to close the peritoneum and abdominal wall, which requires a little more time than finishing from below. The advantages gained by working from above are many. Absence of vaginal scar, which often causes more trouble than the abdominal scar. Retention of the cervix, which can be conserved in most cases. The ability of the operator to examine and correct any coincident conditions which may be encountered.

After the abdomen is opened, examine the location of the tubes and ovaries, this will indicate the position of the ovarian vessels and broad ligaments, which may be very much distorted. If the mass can not be lifted out of the abdomen and presents no point easy of attack, the safest way to begin is to bisect it and turn each half out, removing loose myomata as they appear, thus reducing the size of the tumor, and often clearing up what appeared to be a hopeless anatomical tangle. The hemorrhage from these myomectomies is not usually severe enough to cause any alarm, as the uterine muscle contracts rapidly, assisting materially the hemostasis. It is better in this type of case, after bisection and myomectomy, to cut through the cervix below the lowest myoma, and by making traction, exposing the uterine vessels, which should be clamped and cut. Continue the traction, and each half can be rolled out of the abdomen with the ovarian vessels acting as a pedicle which can be easily clamped. When the broad ligaments have been invaded by the myomatous growth, it is well to bear in mind that the ureters are often lifted out and lie on the circumference of the tumor.

If we find that the growth has encroached more on one side than on the other, begin the operation

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by ligating the ovarian vessels on the easier side, cutting down to the uterine vessels and clamping them. Cut across the cervix, make strong traction, exposing the uterine vessels on the other side, clamp, cut and roll the mass out; clamp the ovarian vessels and cut. H. Kelly.

If the myomatous uterus can be lifted out so that the cervix is exposed, the prettiest and quickest operation is that of Faure, of Paris, who transfixes the cervix and cuts across severing all the cervical tissue. By lifting the tumor the cut surfaces are separated from one to one and one-half inches, and the uterine vessels are easily seen and clamped. A clamp is placed on each set of ovarian vessels, and the specimen removed. This part of the operation can be easily done in a few minutes. The bilateral method is usually the slowest and offers no advantages. The question of the removal of the adnexa is not settled and must rest with the operator. My advice is, unless there are very strong reasons to the contrary, remove them or they will have to be removed subsequently in many cases.

In ligating the vessels, always pass the ligature through the tissues with a needle and thereby avoid any possibility of the vessels retracting and causing subsequent hemorrhage. Bury the stumps of all vessels and leave no surface uncovered by peritoneum. If much broad ligament has been sacrificed, cover with sigmoid flexure or a piece of omentum. Shall we remove the cervix? It is rarely necessary to do so. I have had no recurrences of myomata in cases in which the cervix was not removed. If there is any history of cancer in the family, or if the cervix is lacerated or badly diseased, it had better be removed. The quickest and easiest method is to split with scissors anteroposteriorly right through into the vagina, then cut each half out keeping close to the cervical tissue to avoid the ureters. The bladder and rectum must be carefully handled as they are often thinned and may be torn during efforts at separation from the tumor mass.

When both tubes are the seat of infection, and the disease is chronic, the best result will be obtained by removing the uterus with the rest of the diseased tissues, as it will be found to be infected, and probably require subsequent removal, if left in. It is better to use drainage in all these cases, either through Douglass cul de sac, or preferably by splitting the cervix posteriorly through into the vagina and passing gauze or tube or both from above down into the vagina. This is easily accomplished by using a piece of wire made into a ring and then flattened and bent to fit the pelvic curve. The gauze is passed through one end of the carrier, the other end of which is passed through the cervix or cul de sac and drawn through the vagina by an assistant.

Always attack the easiest point first, leaving the most inaccessible part for the last. This gives us the cue in the choice of operation, and will enable the operator to save time, and simplify the work.

Discussion.

Dr. L. H. Hoffman: I am sure that all present have been much interested and benefited by Dr. Barbat's demonstration and in the main I agree regarding abdominal hysterectomy being the operation of choice. I think most operators voice the opinion that the vaginal operation as a rule is an operation that must be reserved for specially indicated cases. The German gynecologists have shown how important it is to do a laparotomy to determine the extent of the invasion in carcinoma cases before decision as to its operability. Regarding the operation of myoma the indications are very strict. In cases of large myomata the vaginal operation is more dangerous than the abdominal, thereby limiting its scope. In regard to incisions, personally I find the transverse incision of Pfanensteil or one of its modifications a desirable one and an incision that aids in operation, but it has its limitations to tumors with their upper level at the umbilicus. In cases of myomata I very often make a preliminary ligation of the ligamentum coronaria uteri through the vagina, pack with gauze and complete as an abdominal hysterectomy. It is important that we should familiarize ourselves with the different procedures because in certain cases we have to employ them. I think we should master one technic and use the others in indicated cases. Regarding the extirpation of the uterus in carcinoma cases, I am in the habit of doing preliminary work through the vagina and instead of using scissors I use thermo cautery in outlining the vaginal incision and severing the broad ligaments.

Dr. F. B. Carpenter: The technic of the author of the paper is so similar to my own that there is hardly any occasion for my discussing it, but I disagree with him in regard to the removal of the ovaries in every case. I believe it is not good policy ordinarily to sacrifice the ovary which may be a good organ, although perhaps the removal of the uterus made away with its legitimate functioning. However, I think that if an ovary is in a condition in which it is not necessary to remove it that it ought to be saved.

Dr. Julius Rosenstirn: I have only one remark to make on Dr. Barbat's paper, and join with the previous speaker in seriously objecting to the removal of the healthy ovaries as an ordinary routine measure in hysterectomies for fibroid tumors. Dr. Barbat said in his paper that he always found it necessary to remove these organs afterwards, on account of their giving trouble when they were left at the primary operation. This I think is a mistake, such trouble is caused by the tubes when their occlusion is apt to give rise to hydrosalpinx and similar pathological processes. If exsection of the tubes is done and the ovaries remain there is no further trouble, and the distressing nervous symptoms apt to occur in women deprived of their ovaries before the climacteric change, remain absent. It has been my practice to remove all or the greater part of the tubes but to leave the ovaries if they are in a condition to be left.

Dr. Henry J. Kreutzmann: In regard to hysterectomy for carcinoma I have seen so many reports in the literature where there has afterwards been gangrene of the ureter, and of the bladder and it is doubtful to me whether the patient is better after the operation. The main thing to keep in mind is early operation and I believe that if the operation is done early that the simple vaginal operation is a lasting success. The operation of Wertheim is a difficult and formidable operation; it is not an easy operation. I do not see any reason why the cervix should not be removed in hysterectomy for fibroid of the uterus; there have been a number of cases reported where after operation carcinoma developed on the cervix. Years ago

before the Academy I reported a case where after fibroid operation there developed a fibroid of the cervix.

Dr. Barbat, closing discussion: I rather expected to hear from the exponents of vaginal hysterectomy, and I am sorry I did not, as I had something saved for them. While in Vienna I asked one of the assistants in the gynecological clinic how the end results compared in the different types of operation, and he informed me that Wertheim's were the best. When I asked him why they did not do Wertheim's operation in his clinic, he informed me that this was Shauta's clinic. While we will still have to do hysterectomies for cancer for some time, I believe that in two years we will have a remedy that will cure our cancers without having to take them out. Regarding the removal of ovaries, when a woman is within a few years of the menopause, I remove the ovaries and tubes, in younger women they are best left in if not diseased. The tubes are better out.

THE TREATMENT OF URETHRITIS IN THE MALE.*

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In no department of medicine is there such a uniformity of opinion as that which prevails in regard to the results following the intelligent treatment of urethral discharges, which being condensed might be called "discouragingly uncertain," in every case of a specific nature.

Notwithstanding this, the last few years have added much to the therapy of the urologist. It is merely with a view to giving a short summary of the most valuable of these (as determined by our own results), that this paper is undertaken; not to claim anything original.

The reason we have not touched on the subjects of pathology, diagnosis, or anatomy is that you all have that part of the subject at your disposal in every text book. Empiricism is one of the most powerful therapeutic guides, and we feel that a clear report on something we have tried and found good, is worth more than volumes of scientific theorizing.

For convenience urethral discharges may be divided into two great classes—the specific and the non-specific. By the non-specific we refer to those cases (which form a very small percentage of the condition), in which the gonococcus is not the etiologic factor, and by the specific we refer to those cases whose name is legion, in which the diplococcus of Neisser is demonstrated.

Taking the non-specific forms first, as they are both less common and more responsive to treatment, we can divide them according to the etiological factor, into simple urethrorrhea, in which so far as we can determine there are no local lesions; erythismic due to repeated excessive coition or prolonged ungratified sexual excitement.

Traumatic urethritis. Irritative urethritis, such as we find following the ingestion of certain drugs and food, or in certain diathetic conditions with irritating urine, as in gouty and rheumatic cases.

Eruptive urethritis occurring coincident with certain acute exanthemata.

Concomitant urethritis due to disease of para and periurethral structures. Simple urethrorrhea is a condition due to a relaxed and leaky mucous membrane and represents an excessive quantity of what is in character a normal secretion. This occurs as a result of general physical depravity, such as follows acute exhausting diseases like typhoid, scarlet fever, etc., and the observer will have no difficulty in recognizing it. The treatment is obvious.

The treatment of the traumatic variety is first prophylactic—e. g. use septic instruments, and use them skillfully, and precede their use with thorough cleansing of the glans and by antiseptic flushings. In the acute stage the most that can be done is to put the patient to bed and order hot sitz baths, diluents per orem, rectal suppositories of opium, eucaine and adrenalin instillations, and in a comparatively short time the condition is under control. Hexamethyline tetramine in 7½ gr. doses is valuable.

The irritative urethritis if due to the ingestion of substances known to be irritants to the urinary tract will usually subside under liberal doses of water and avoidance of the ingestion of the same or similar drugs or foods again.

The rheumatic and gouty cases will clear up as the internist succeeds or fails in the therapeusis of the general disease.

The erethysmic variety forms quite a large percentage of the many male sexual incompetents who flock to the charlatans after reading the wonders accomplished by the said gentlemen, in the daily press, and at another time we hope to present some end results in the treatment of this class of cases, but as yet we are not complete in our records.

The internal treatment is mainly systemic, to be supplemented with the judicious use of the cold sound, urethral-psychophore, the latter especially if the urethroscope shows a turgescence and flaccidity of the region of the verumontanum. Exercise, hydrotherapy, diet and avoidance of excesses or long continued sexual excitement, are all to be remembered.

The eruptive and herpetic forms if recognized will be found to be self limited as a rule.

The treatment of the concominant form including folliculitis, prostatitis, vasitis, seminal-vesiculitis and systitis is in the great majority of cases that of a deep-seated gonorrhea, as most of these deep inflammatory conditions come after a gonococcic infection, and therefore we will refer to them under that head.

Coming at last to specific urethritis, the subject is so extensive that we must of necessity divide the treatment into periods of time and into subdivisions depending on the region of the urethra involved.

First as to prophylactic treatment. We have a small series of cases in which there was exposure to undoubted gonococcic infection, and in which the employment of a thorough external cleansing with bichloride, 1 in 5000, followed by injection into the anterior urethra of a 20 per cent. argyrol solution retaining same for about 5 minutes, has so far proven effective, and save for the chemical

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